

DEC 01 2006

Application No.: 10/532,818Docket No.: 4590-395**REMARKS**

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-17 remain pending in the application. Claim 1 has been amended and claims 18 and 19 have been added.

Claim 1 was objected to because of the noted informalities. Applicant has amended claim 1 as suggested by the Examiner. Therefore, this objection should be withdrawn.

Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In response, claim 1 has been amended substantially in accordance with the Examiner's interpretation of claim 1.

Further, regarding the meaning of "compensation": this word is explained from the beginning of the specification (page 1, lines 15-38): "...a good value of the variable  $R_2$  to compensate for a poor value of  $R_1$ ," (page 1, line 35-36). Since this compensation refers to decision trees and since these decision trees include inaccuracies and uncertainties, the latter are classically modeled by virtue of the use of fuzzy logic (page 1, lines 15-25). This does not mean that the compensation which is claimed is necessarily a "fuzzy compensation" (see e.g. page 15, lines 14-32: it is explained therein how compensation, without fuzziness, is introduced into a nonfuzzy rule). Hence, the claimed compensation could be defined e.g. as "the compensation, in a decision tree, of a poor value of a first variable by a good value of another variable", since "fuzzy compensation" does not seem to define well enough this kind of compensation.

It appears that claim 1 was poorly translated. In fact, the expert system establishes decision making rules and asks the (human) expert a compensation condition into the non-clearly identifiable rules in view to define together with him on which "particular point belonging to a compensation boundary and connected with the parameter" can help to define a contingent compensation (as defined hereabove). Thus is provided a modeling of the decision process, i.e. this is a computer aided decision making. Hence, the Examiner's interpretation of Claim 1 seems correct.

**Application No.: 10/532,818****Docket No.: 4590-395**

Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter: mathematical algorithm and/or software. Applicant respectfully traverses this rejection.

The claimed invention refers to a decision making method used in the absence of clearly identifiable rules, i.e. when a decision tree comprises a lot of inaccuracies and uncertainties, which cannot be solved by a human expert. Hence, the invention provides a «specific, substantial and credible utility» which helps the expert in finding out the way of reconciling different kinds of parameters when positive aspects can compensate for the negative aspects of a problem, these negative aspects not being negligible. The claimed method provides a result that is “substantially repeatable at the compensation boundaries in real world problems....” (see e.g., page 15, line 34 to page 16, line 15): this very simple example shows that the students are indeed always judged according to equitable and reproducible criteria. Accordingly, this rejection should be withdrawn.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita in view of Tzes et al., and further in view of Botteldooren et al. Applicant respectfully traverses this rejection.

The Examiner concedes that “neither Tomita nor Tzes et al. teach asking questions to allowing the system to introduce a compensation condition into the non-clearly identifiable rules”. Claim 1 recites “asking questions for allowing the systems to introduce a compensation condition into the non-clearly identifiable rules.” Claim 19 recites “asking questions for allowing the system to introduce a compensation condition for the parameters of a decision tree wherein a poor value of a first variable is compensated by a good value of another variable...”. However, none of the cited references, either taken alone or in combination, describes the compensation. Accordingly, this rejection should be withdrawn.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita in view of Tzes et al. and Botteldooren et al. and further in view of Pal et al. Applicant respectfully traverses this rejection.

Botteldooren et al. does not overcome the deficiencies of Tomita and Tzes et al. Botteldooren et al. discloses an “aggregation of the impact of all the sources”. This is a mere

**Application No.: 10/532,818****Docket No.: 4590-395**

merging (or addition) of parameters that has nothing to do with any compensation. Accordingly, this rejection should be withdrawn.

Pal et al disclose a pruning method for a decision tree, which "removes all rules which cannot meet a certain level of performance", i.e. this is just the contrary of our method which "rescues" (thanks to the compensation) weak rules, which would be "pruned" if using the method of Pal et al. Accordingly, this rejection should be withdrawn.

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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